

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of the claims in the application:

1-23. (Canceled)

24. (New) A power control system for a model train traveling on a track, comprising:

- a transformer operatively coupled to the track to supply an operating voltage thereto;

- at least one accessory associated with at least one of the model train and the track; and

- a voltage regulator operatively coupled to the at least one accessory to supply a regulated voltage thereto derived from the operating voltage, the voltage regulator comprising:

- a load control unit having an output coupled to the accessory, the load control unit being responsive to a load control signal for controlling delivery of the regulated voltage to the accessory;

- a feedback unit coupled to the output of the load control unit and adapted to provide a feedback signal indicative of the regulated voltage at the output; and

- a controller responsive to said feedback signal and adapted to generate the load control signal such that the regulated voltage substantially corresponds to a reference voltage level, the controller being further responsive to a user command to define the reference voltage level.

25. (New) The power control system of Claim 24, wherein the controller is adapted to determine deviation between the regulated voltage and the reference voltage level.

26. (New) The power control system of Claim 24, wherein the user command comprises a digital message.

27. (New) The power control system of Claim 24, wherein the voltage regulator further comprises a reset unit operatively connected to the controller.

28. (New) The power control system of Claim 24, wherein the load control unit includes at least one bi-directional switching device.

29. (New) The power control system of Claim 28, wherein the switching device is a triac.

30. (New) The power control system of Claim 29, wherein the power regulator further comprises a zero-cross detection unit adapted to detect a zero crossing of the operating voltage and enable the controller to derive a corresponding phase-conduction angle of the triac therefrom.

31. (New) The power control system of Claim 24, wherein the controller is adapted to generate the load control signal in accordance with a proportional-integral (PI) transfer function.